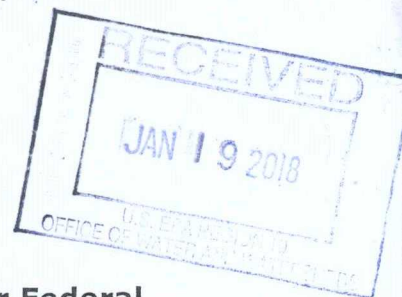


WAG130008
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EPA General Permit WAG130000 - Annual Report



Annual Report of Operations
for Year 2017



To comply with NPDES General Permit No. WAG130000 for Federal
Aquaculture Facilities and Aquaculture Facilities Located in Indian
Country within the Boundaries of the State of Washington

NPDES # for your Facility:

WAG 13008

Facility & Owner Information

Facility Name:

Winthrop National Fish Hatchery

Operator Name (Permittee):

United States Fish and Wildlife Service

Address: - Physical - 453A Twin Lakes Road
Winthrop, WA, 98862

Mailing - Winthrop NFH
POB 429
Winthrop, WA, 98862

Email:

bob_gerwig@fws.gov

Phone:

509-996-2424

Owner Name (if different from operator):

Email:

Phone:

Best Management Practices (BMP) Plan

Has the BMP Plan been reviewed this year? ☒ Yes ☐ No

Does the BMP Plan fulfill the requirements of the General Permit? ☒ Yes ☐ No

Summarize any changes to the BMP Plan since the last annual report. Attach additional pages if necessary.

No changes since last reporting.

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EPA General Permit WAG130000 - Annual Report

Operations and Production

Total harvestable weight produced in the past calendar year in pounds (lbs): 83,984 lbs.

Pounds of food fed to fish during the maximum month:

March 2017 → 15,343 lbs.

List the species grown or held at your facility and the annual production of each in gross harvestable weight. If fish were released rather than harvested, list the weight at time of release.

Species	Fish Produced	Receiving Water(s) to which Fish were Released	Month Released/ Spawned
Summer Steelhead	39,739	Methow River	May
Coho Salmon	20,900	Methow River	May
Spring Chinook	23,345	Methow River	April

Fill in the table below with production numbers from the past year. List the **maximum** amount of fish on-site and the maximum amount of food fed **per month**.

Month	Total Fish (lbs)	Fish Feed (lbs)	Month	Total Fish (lbs)	Fish Feed (lbs)
January	47,589	3,385	July	15,386	4,294
February	52,079	3,641	August	22,835	6,362
March	80,885	15,343	September	32,108	7,931
April	94,882	9,650	October	40,327	5,135
May	6,170	1,645	November	44,306	3,563
June	10,053	3,070	December	46,386	1,857

Additional Comments:

EPA General Permit WAG130000 - Annual Report

Solid Waste Disposal

Describe the solid waste disposed of during the calendar year (including fish mortalities).

Type of Solid Disposed	Date Disposed	Location Disposed
Daily Fish Mortalities	Daily	Buried in station "mort" pit.
Excess Fish Feed	May 2017	Buried on-Station
Spawned Adult Carcasses	August + November 2017	Buried in station "mort" pit.
Additional Comments:		

Fish Mortalities

Include a description and the dates of mass mortalities in the past year (more than 5% per week). Attach additional pages, if necessary. Include total mortalities from all causes.

Date	Cause of Deaths	Steps Taken to Correct Problem	Pounds of Fish
None			

Additional Comments:

EPA General Permit WAG130000 - Annual Report

Noncompliance Summary

Include a description and the dates of noncompliance events (including spills), the reasons for the incidents, and the steps taken to correct the problems. Attach additional pages, if necessary.

- Exceeded Total Suspended Solids effluent parameter by 0.2 mg/Liter for November 2017. This exceedance was most likely due to a large number of waterfowl (>30) temporarily residing in and around the station's settling pond. This was an unusual event and these migratory birds have since moved on. Staff have installed several imitation coyotes & owls to mimic potential predators. These actions have kept the presence of diving waterfowl negligible.

Inspections & Repairs for Production & Wastewater Treatment Systems

Date Inspected	Date Repaired	Description of System Inspected and/or Repaired
	10/2-3/2017	Settling Pond Clean-Out

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Aquaculture Drugs and Chemicals

Please indicate whether you used each drug/chemical **during the past calendar year**.

Describe the use of each drug/chemical in more detail on the following pages.

Used in the past year?	Drug or Chemical
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Azithromycin
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Chloramine-T: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Chlorine
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Draxxin
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Erythromycin - injectable
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Erythromycin - medicated feed
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Florfenicol (Aquaflor)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Formalin - 37% formaldehyde: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Herbicide - describe:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Hormone - describe:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Hydrogen Peroxide: <i>See additional reporting requirements on page 7</i>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Iodine: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Oxytetracycline
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Potassium Permanganate: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Romet
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SLICE (emamectin benzoate)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sodium Chloride - salt
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vibrio vaccine
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Other:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Other:

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Aquaculture Drugs and Chemicals (cont'd)

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: <u>Parasite - S</u>		Generic Name: <u>Formalin (37% Formaldehyde)</u>	
Reason for use: <u>Inhibit Fungal Growth on Adult Broodstock</u>			
<input checked="" type="checkbox"/> Preventative/Prophylactic <input type="checkbox"/> As-needed	Total quantity of formulated product per treatment (specify units): <u>3.5 U.S. Gal.</u>	Total quantity of formulated product used in past year (specify units): <u>283.5 U.S. Gallons</u>	
Date(s) of treatment: <u>03/17 → 04/17, 07/17 → 08/17, 10/17-11/17</u> <u>Used every other day while holding broodstock</u>			Total number of treatments in past year: <u>81</u>
Maximum daily volume of treated water: <u>18,000 gallons</u>	Treatment concentration (specify units): <u>193 ppm</u>	Duration and frequency of treatment(s): <u>1 hour / every other day</u>	
Method of application:	<input type="checkbox"/> Static Bath <input checked="" type="checkbox"/> Flow-through	<input type="checkbox"/> Medicated Feed <input type="checkbox"/> Other (describe):	
Location in facility chemical was used (check all that apply):	<input type="checkbox"/> Raceways <input type="checkbox"/> Incubation building	<input type="checkbox"/> Ponds <input type="checkbox"/> Off-line settling basin <input checked="" type="checkbox"/> Other (describe): <u>Adult Holding Facility</u>	
Where did water treated with this chemical go? (check all that apply):	<input checked="" type="checkbox"/> Discharged w/o treatment <input type="checkbox"/> Settling basin	<input type="checkbox"/> Septic System <input type="checkbox"/> Publicly owned treatment works <input type="checkbox"/> Other (describe):	
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:			

Brand Name: <u>Parasite - S</u>		Generic Name: <u>Formalin (37% Formaldehyde)</u>	
Reason for use: <u>Treatment for the parasite, Icthyophthirius multifiliis</u>			
<input type="checkbox"/> Preventative/Prophylactic <input checked="" type="checkbox"/> As-needed	Total quantity of formulated product per treatment: <u>2.0 U.S. gallons</u>	Total quantity of formulated product used in past year (specify units): <u>52 gallons</u>	
Date(s) of treatment: <u>8/25 thru 8/30 & 09/01 → 09/04/2017</u>			Total number of treatments in past year: <u>26</u>
Maximum daily volume of treated water: <u>36,000 U.S. Gal.</u>	Treatment concentration (specify units): <u>50 ppm</u>	Duration and frequency of treatment(s): <u>4 hours per treatment / As needed</u>	
Method of application:	<input type="checkbox"/> Static Bath <input checked="" type="checkbox"/> Flow-through	<input type="checkbox"/> Medicated Feed <input type="checkbox"/> Other (describe):	
Location in facility chemical was used (check all that apply):	<input checked="" type="checkbox"/> Raceways <input type="checkbox"/> Incubation building	<input type="checkbox"/> Ponds <input type="checkbox"/> Off-line settling basin <input type="checkbox"/> Other (describe):	
Where did water treated with this chemical go? (check all that apply):	<input type="checkbox"/> Discharged w/o treatment <input checked="" type="checkbox"/> Settling basin	<input type="checkbox"/> Septic System <input type="checkbox"/> Publicly owned treatment works <input type="checkbox"/> Other (describe):	
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:			

EPA General Permit WAG130000 - Annual Report

Aquaculture Drugs and Chemicals (cont'd)

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: <u>Ovadine</u>		Generic Name: <u>Buffered PVP Iodine</u>	
Reason for use: <u>Disinfection of Fertilized Fish Eggs</u>			
<input checked="" type="checkbox"/> Preventative/Prophylactic <input checked="" type="checkbox"/> As-needed	Total quantity of formulated product per treatment (specify units): <u>1125 ml</u>	Total quantity of formulated product used in past year (specify units):	
Date(s) of treatment: <u>4/12, 4/19, 4/26, 5/03, 5/10, 8/14, 8/21, 8/28, 9/05, 10/23, 10/30, 11/06, 11/13, 11/20</u>			Total number of treatments in past year: <u>14</u>
Maximum daily volume of treated water: <u>30 U.S. gallons</u>	Treatment concentration (specify units): <u>75 ppm</u>	Duration and frequency of treatment(s): <u>15 minutes per treatment</u> <u>1 treatment per spawn event</u>	
Method of application:	<input checked="" type="checkbox"/> Static Bath <input type="checkbox"/> Flow-through	<input type="checkbox"/> Medicated Feed <input type="checkbox"/> Other (describe):	
Location in facility chemical was used (check all that apply):	<input type="checkbox"/> Raceways <input checked="" type="checkbox"/> Incubation building	<input type="checkbox"/> Ponds <input type="checkbox"/> Off-line settling basin	<input type="checkbox"/> Other (describe):
Where did water treated with this chemical go? (check all that apply):	<input type="checkbox"/> Discharged w/o treatment <input checked="" type="checkbox"/> Settling basin	<input type="checkbox"/> Septic System <input type="checkbox"/> Publicly owned treatment works	<input type="checkbox"/> Other (describe):
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:			

Brand Name:		Generic Name:	
Reason for use:			
<input type="checkbox"/> Preventative/Prophylactic <input type="checkbox"/> As-needed	Total quantity of formulated product per treatment:	Total quantity of formulated product used in past year (specify units):	
Date(s) of treatment:			Total number of treatments in past year:
Maximum daily volume of treated water:	Treatment concentration (specify units):	Duration and frequency of treatment(s):	
Method of application:	<input type="checkbox"/> Static Bath <input type="checkbox"/> Flow-through	<input type="checkbox"/> Medicated Feed <input type="checkbox"/> Other (describe):	
Location in facility chemical was used (check all that apply):	<input type="checkbox"/> Raceways <input type="checkbox"/> Incubation building	<input type="checkbox"/> Ponds <input type="checkbox"/> Off-line settling basin	<input type="checkbox"/> Other (describe):
Where did water treated with this chemical go? (check all that apply):	<input type="checkbox"/> Discharged w/o treatment <input type="checkbox"/> Settling basin	<input type="checkbox"/> Septic System <input type="checkbox"/> Publicly owned treatment works	<input type="checkbox"/> Other (describe):
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:			

EPA General Permit WAG130000 - Annual Report

Aquaculture Drugs and Chemicals (cont'd)

Additional Reporting Requirements for Water-Borne Treatments

- If a water-borne treatment was used during the calendar year, Permittees must include detailed records/calculations as an attachment to this Annual Report in order to demonstrate how the maximum effluent concentrations of solution and active ingredient were calculated for each chemical.
- EPA recognizes that water-borne treatments may vary in the volume of the vessels treated, concentration, quantity of product, etc. Permittees must provide the information listed in the following tables for a reasonable worst case (i.e., maximum effluent concentration) scenario, not for each individual treatment.
- Permittees must submit this information and calculate the maximum effluent concentration for each water-borne chemical used during the past calendar year.
- See also Appendix D for the Chemical Log Sheet.

Static Bath Treatments - Ovadine	
Tank Volume	113 Liters
Desired Static Bath Treatment Concentration	75 µg/L
Volume of Product Needed	1.125 Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: 25 ppm Active Ingredient: 0.02 ppm Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	13,850,000 gallons per day Specify Units
Maximum % of Facility Discharge Treated	0.00021 % % of Total Discharge

Flow-Through Treatments - Formalin	
Tank Volume	229366 Liters
Calculated Flow Rate	1147 Liters/Minute
Duration of Treatment	60 Minutes
Desired Flow-Through Treatment Concentration of Product	193 µg/L
Amount of Product to Add Initially	0.00378 Liters Product
Amount of Product to Add During Treatment	227 mL/Minute
Total Volume of Product Needed	13.63 Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: 5.93 5.93 ppm Active Ingredient: 2 ppm Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	13,850,000 gallons per day Specify Units
Maximum % of Facility Discharge Treated	0.12996 % % of Total Discharge

EPA General Permit WAG130000 - Annual Report

Changes to the Facility or Operations

Describe any changes to the facility or operations since the last annual report.

No changes since last reporting.

Signature and Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly evaluate and gather the information submitted. Based on my inquiry of the person or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>Robert M. Gerwig Jr</i>	<i>Assistant Manager</i>
Printed name of person signing	Title
<i>[Signature]</i>	<i>01/11/2018</i>
Applicant Signature	Date Signed

Submittal Information

Send the complete, signed information, along with any attachments, to the following address:

U.S. EPA Region 10, OWW-191
Washington Hatchery Annual Report
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

Quality Assurance Plan
(QA Plan)
Certification

Facility Name: Winthrop NFH
NPDES Permit Number: WAG-13-0008

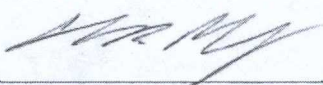
The QA Plan is complete and is available upon request to the EPA.

The QA Plan is being implemented by trained employees.

The QA Plan has been reviewed and endorsed by the facility manager.

The individuals responsible for implementation of the QA Plan have been properly trained.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature: 	Title/Company: <u>Hatchery Manager / USFWS</u>
Print Name: <u>Chris R. Pasley</u>	Date: <u>12/20/17</u>

An existing discharger must submit this certification within 90 days of the effective date of this permit. For a new Permittee, this certification must be submitted no later than the written Notice of Intent to be covered under this permit. The certification must be submitted to the EPA.

Best Management Practices Plan
(BMP Plan)
Certification

Facility Name: Winthrop NFH

NPDES Permit Number: WAG-13-0008

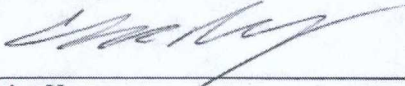
The BMP Plan is complete and is available upon request to the EPA.

The BMP Plan is being implemented by trained employees.

The BMP Plan has been reviewed and endorsed by the facility manager.

The individuals responsible for implementation of the BMP Plan have been properly trained.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature: 	Title/Company: <u>Hatchery Manager / USFWS</u>
Print Name: <u>Chris R. Pasley</u>	Date: <u>12/20/17</u>

An existing discharger must submit this certification within 90 days of the effective date of this permit. For a new Permittee, this certification must be submitted no later than the written Notice of Intent to be covered under this permit. The certification must be submitted to the EPA.